

WHAT IS CLAIMED IS:

- administration to an animal recipient in need thereof, which comprises an antigen-presenting cell expressing at least one class I MHC or class II MHC determinant that is syngeneic to the recipient and at least one class I or class II MHC determinant that is allogeneic to the recipient and wherein said antigen presenting cell is transformed with and expresses DNA coding for at least one antigen recognized by T cells.
- 2. A semi-allogeneic immunogenic cell for administration to an animal recipient in need thereof, which comprises an antigen-presenting cell expressing at least one class I MHC or class II MHC determinant that is syngeneic to the recipient and at least one class I or class II MHC determinant that is allogeneic to the recipient and wherein said antigen presenting cell is transformed with and expresses DNA isolated from a neoplasm or a tumor of the recipient.
- administration to an animal recipient in need thereof, which comprises a semi-allogeneic hybrid cell formed by fusing an antigen presenting cell with a tumor cell, wherein said hybrid cell expresses at least one class I or class II MHC determinant that is syngeneic to a recipient and at least one class I or class II MHC determinant that is allogeneic to the recipient, and wherein said hybrid cell also expresses at least one antigen recognized by T cells.

- 4. The semi-alloceneic immunogenic cell of Claim 3, wherein said tumor cell is from a neoplasm or a tumor of the recipient.
- 5. The semi-allogeneic immunogenic cell of any one of Claims 1-4, wherein said antigen presenting cell is further transformed with a coding sequence for at least one cytokine.
- 6. The semi-allogeneic immunogenic cell of Claim 5 wherein the cytokine is selected from the group consisting of interleukin-1, interleukin-2, interleukin-3, interleukin-4, interleukin-5, interleukin-6, interleukin-7, interleukin-8, interleukin-9, interleukin-10, interleukin-11, interleukin-12, interferon-α, interferon-, tumor necrosis factor, granulocyte macrophage colony stimulating factor.
- 7. The semi-allogeneic immunogenic cell of any one of Claims 1-4, wherein the antigen-presenting cell is selected from the group consisting of a fibroblast, a macrophage, a B cell, and a dendritic cell.
- 8. The semi-allogeneic immunogenic cell of Claim 2 or Claim 4, wherein the neoplasm is selected from the group consisting of melanoma, lymphoma, plasmocytoma, sarcoma, glioma, thymoma, leukemias, breast cancer, prostate cancer, colon cancer, esophageal cancer, brain cancer, lung cancer, ovary cancer, cervical cancer, and hepatoma.

- 9. The semi-allogeneic immunogenic cell of Claim 2 wherein the DNA isolated from a neoplasm or tumor comprises coding sequences for tumor associated antigens.
- 10. The semi-allogeneic immunogenic cell of Claim 2 wherein the DNA isolated from neoplastic cells comprises coding sequences for tumor associated antigens that are associated with a tumor, wherein said tumor is selected from the group consisting of melanoma, lymphoma, plasmocytoma, sarcoma, glioma, thymoma, leukemias, breast cancer, prostate cancer, colon cancer, esophageal cancer, brain cancer, lung cancer, ovary cancer, cervical cancer, and hepatoma.
- 11. A therapeutic composition comprising the semi-allogeneic immunogenic cell of at least one of Claims 1, 2, 3, 4, 9, and 10 admixed with a therapeutically acceptable carrier.
- 12. A therapeutic composition comprising the semi-allogeneic immunogenic cell of Claim 5 admixed with a therapeutically acceptable carrier.
- 13. A therapeutic composition comprising the semi-allogeneic immunogenic cell of Claim 6 admixed with a therapeutically acceptable carrier.
- 14. A therapeutic composition comprising the semi-allogeneic immunogenic cell of Claim 7 admixed with a therapeutically acceptable carrier.

A therapeutic composition comprising the semi-allogeneic immunogenic cell of Claim 8 admixed with a therapeutically acceptable carrier.

A method of inducing an immunological 16. response in an animal in need of such response which comprises administering to said animal an immunologically effective amount of the semiallogeneic immunogenic cell of at least one of Claims 1, 2, 3, 4, 9 and 10.

- A method for inducing an immunological response in an animal in need of such response which comprises administering to said animal an immunologically effective amount of the semi-allogenic immunogenic cell of Claim 5.
- A method for inducing an immunological response in an animal in need thereof which comprises administering to said animal an immunologically effective amount of the semi-allogeneic immunogenic cell of Claim 6.
- A method for inducing an immunological response in an animal in need thereof which comprises administering to said animal an immunologically effective amount of the semi-allogeneic immunogenic cell of Claim 7.
- A method for inducing an immunological response in an animal in need thereof which comprises administering to said animal an immunologically

effective amount of the semi-allogeneic immunogenic cell of Claim 8.

- 21. A method for inducing an immunological response which comprises administering to an animal in need thereof an immunologically effective amount of the therapeutic composition of Claim 11.
- 22. A method for inducing an immunological response which comprises administering to an animal in need thereof an immunologically effective amount of the therapeutic composition of Claim 12.
- 23. A method for inducing an immunological response which comprises administering to an animal in need thereof an immunologically effective amount of the therapeutic composition of Claim 13.
- 24. A method for inducing an immunological response which comprises administering to an animal in need thereof an immunologically effective amount of the therapeutic composition of claim 14.
- 25. A method for inducing an immunological response which comprises administering to an animal in need thereof an immunologically effective amount of the therapeutic composition of Claim 15.
- 26. A method of preventing or treating a tumor in an animal in need thereof which comprises administering to said animal a tumor inhibiting effective amount of the semi-allogeneic immunogenic

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population of cells of at least one of Claim 2, 3 and

27. The method of Claim 26 wherein the tumor is a solid tumor or hematological tumor.

administration to an animal recipient in need thereof, which comprises an antigen-presenting cell expressing at least one of class I or class II MHC determinants, wherein said antigen presenting cell is genetically selected such that at least one of said class I MHC or class II MHC determinants is syngeneic to the recipient and at least one of said class I or class II MHC determinants is allogeneic to the recipient, and wherein said antigen presenting cell expresses at least one antigen recognized by T cells.

MARY

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